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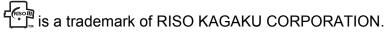
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⚠ Caution:

- Make sure to read the important operational safety information.
- Store this manual close-by, and fully acquaint yourself with the printing machine.

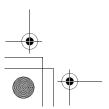
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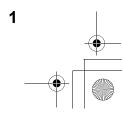
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- As we are constantly improving our products, the machine may differ in some respects from the illustrations used in this manual.
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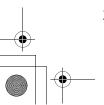


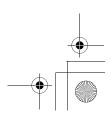


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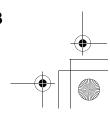




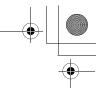




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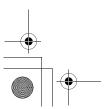
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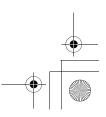
About the notations used on This Manual

The specifications of this machine are represented either by the unit of mm or inch. When this machine is installed, the service personnel sets the unit for the machine to either mm or inch.

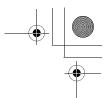
Depending on the specifications, the enlargement / reduction ratio and printing area differ. If you want to change the current settings, consult your dealer.

- For the word with different spelling between US English and UK English, US spelling is basically used on this manual. Exception: Drum (Cylinder)
- A unit of linear measure is shown in both metric and inch formats as follows. Ex: 297 mm (11 ¹¹/₁6")
- A unit of weight is shown in both g/m² and lb bond as follows. Ex: 50 g/m² to 128 g/m² (14-lb bond to 34-lb bond)
- The paper size is shown as follows. Ex: A4 (Letter) B4 (Legal)









Welcome to the RISO KZ30

Thank you for purchasing this printing machine that produces clear prints with easy key operations. Besides many useful functions as a printer, the machine provides you with various conveniences. This manual contains detailed instructions concerning the operation and maintenance of the machine. In order to optimise the use of the machine, all operators should carefully read and follow the instructions contained in this manual. This manual also contains a troubleshooting guide for easy reference. Read this manual before using the machine. Open this manual when you have any question or any time necessary, and use the manual together with your machine.

About the notations in the explanatory note

The following caution markings and symbols are used throughout this manual.

Failure to follow WARNING instructions could result in severe injury or death to the person

who handles or services the machine.

⚠ CAUTION Indicates that incorrect handling by ignoring this symbol may cause human injury or

damage to properties.

Important! Provides information that should be carefully heeded and inhibited operations.

Carefully read the Important information and follow its instructions.

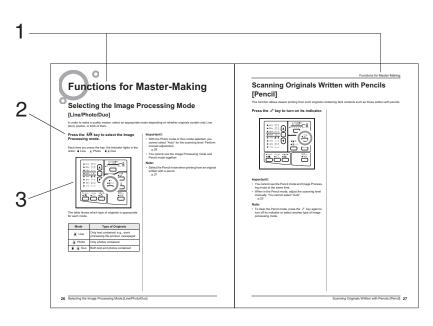
Note Provides you useful information.

Tip Gives you additional hints for more convenience.

(8) Shows a reference page.

About the notations for operations and machine functions

This manual describes the machine functions and operations using the following notations.



1) Chapter Title

Operation procedure

The machine operations are described in the step-by-step sequence. Operate the machine by following the steps sequentially.

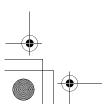
Illustrated operations

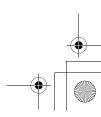
Shows the location or the control panel related to each step.

About Terminologies used on This Manual

Operation to scan an original page and to make a master **Master Making:** Print: Operation to use a master of an original and to print it on paper

The setting values when the machine is turned on **Default Setting:**









Safety Guide - Installation

This section describes precautions to be observed when installing the machine. Read this section before installing the machine.

Note:

Your dealer will help you to determine a proper location for the machine at the time of delivery.

Installation

AWARNING:

- Place the machine on a flat and stable surface. Injury might occur if the machine falls.
- Install the machine in a well-ventilated area. Failure to do so may result in serious health problems.

⚠ Caution:

- · Keep the machine away from dusty environments. Failure to do so may result in fire.
- Install the machine near the electrical outlet to avoid using an extension cord between the machine and the electrical outlet. If an extension cord is necessary, do not use one longer than 5 meters (15 feet).

Important!:

- Select the installation location where the machine can be placed in horizontal. (Levelness of floor: Up to 10 mm (3/8 inches) in both longitudinal and traverse directions)
- Avoid installing the machine in the locations listed below. Failure to observe this precaution may lead to machine failure.
- Locations with exposure to direct sunlight, such as locations close to windows (Curtain all windows that might expose the machine to direct sunlight.)
- Locations that are subject to sudden changes in temperature
- Extremely hot and humid locations or cold and dry locations
- Heated locations
- Locations exposed to direct cold air, direct hot air, or direct radiant heat
- When installing the machine on a stand (such as a desk), use the one which is larger than the machine.

Power connection

AWARNING:

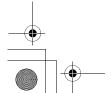
- Do not overload the electrical outlet or extension cord, or damage the power cord by placing heavy objects on it or pulling or bending it. This can result in fire or electric shock.
- Do not pull the power cord but hold the plug itself when unplugging it. This can damage the cord and result in fire
 or electric shock.
- Do not plug or unplug the power cord if your hands are wet. This can result in electric shock.

⚠Caution:

 Pull out the power cord plug from the electrical outlet more than once a year and clean the prongs of the plug and their surroundings. Dust that collects in these areas can result in fire.

Important!

- · Check the power cord and plug for poor connections. Plug the power cord securely into a nearby electrical outlet.
- Be sure to turn off the POWER switch when connecting or disconnecting a cable.







Safety Guide - Handling and Operation

This section describes the precautions to be observed and the information the user should be aware of when operating the machine.

Operating environments

Important!:

 Operate the machine under the following appropriate environment conditions. Temperature range: 15°C to 30°C (59°F to 86°F) Humidity range: 40% to 70% (noncondensing)

Machine Handling

AWARNING:

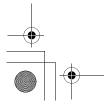
- Do not place water containers or metallic objects on the machine. Fire or electric shock may occur if water or metallic objects fall into the machine.
- Do not insert any metallic material or flammable substance into the machine through any opening. This can result in fire or electric shock.
- · Do not remove machine covers. Exposing internal parts may result in electric shock.
- Do not disassemble or rebuild the machine by yourself. This can result in fire or electric shock.
- · If the machine emits excessive heat, smoke or foul odor, immediately turn off the POWER, unplug the power cord and contact your service representative. Failure to do so can result in fire or electric shock.
- If something has dropped inside the machine, immediately turn off the POWER, unplug the power cord, and contact your service representative. Failure to do so can result in fire or electric shock.
- Never stick your hands or fingers in the openings of the machine during operation.
- Keep loose clothing or long hair away from moving parts to avoid becoming entangled.
- Do not place heavy objects on the machine. The objects might fall and cause injury.
- · Contact your service representative when moving the machine.

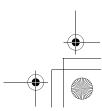
⚠ Caution:

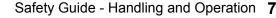
- Do not open any cover or move the machine during operation.
- Unplug the power cord from the receptacle if you do not use the machine for a long time.
- Screws, etc. protrude from the paper feed tray and paper receiving tray connection area. Do not insert your hand or fingers in this area while it is in use. Also take care of the metal parts on the base when carrying the machine.
- When putting your hand into the unit, take care not to touch the paper separation hook or surrounding parts (especially the metal plate parts). The sharp tip of the hook and the cut surface of the metal can hurt your hand.
- The machine has precision parts and driving mechanism inside. Do not handle the machine in ways other than those described in this guide.
- · Do not apply any shock to the machine.

Important!:

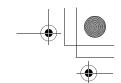
- Do not unplug the power cord or turn off the power during operation.
- · Be sure to open and close all machine covers gently.











Before Starting to Use

Consumables

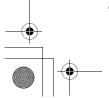
Important!:

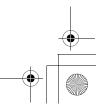
- · For ink and Master Roll, it is recommended to use the products specified by RISO.
- Store the consumables such as paper, Master Roll and ink properly. Do not store consumables in the following places:
 - Locations that are subject to direct sunlight or bright locations that are close to windows (if there is no other choice, pull the curtains across the windows.)
 - Locations that are subject to rapid changes in temperature
 - Extremely hot and humid locations or extremely cold and dry locations

Ink Handling

⚠ Caution:

- · If ink gets into your eyes, flush it out immediately with plenty of water.
- · If ink comes into contact with your skin, wash it off thoroughly using soap.
- · Allow plenty of ventilation during printing.
- If you feel unwell during use, seek medical advice.
- · Only use the ink for printing purposes.
- · Keep the ink out of the reach of children.



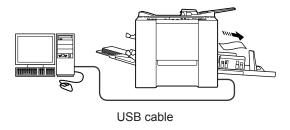






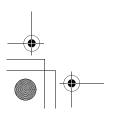
Connection with a Computer (Option)

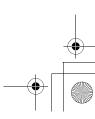
With an optional interface card (RISO PC Interface Card USB 2.0) installed, you can directly send data from a connected computer to the machine as an original for printing. Because digital data itself is used for making a master, the finish of prints becomes outstanding.



Important!:

- The maximum allowable voltage for USB 2.0 connector input and output is 5 V.
- Use a commercially available USB cable (that conforms to the USB 2.0 standard / Length within 3m (10ft)).







Before Starting to Use



Size and Weight Restrictions

The table shows the specifications of usable print paper.

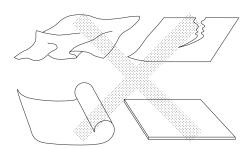
	Usable Printing Paper		
Unit	Size	Weight	
mm	182 mm × 257 mm to 297 mm × 420 mm	50 g/m ² to 128 g/m ²	
inch	$7^{3}/_{16}$ " \times 10 $^{1}/_{8}$ " to 11 $^{11}/_{16}$ " \times 16 $^{17}/_{32}$ "	14-lb bond to 34-lb bond	

Important!:

- Be sure to load printing paper larger than the images to be created. If printing paper is smaller than the images, the inner rollers may be stained and it may result in smudges on the prints.
- Be sure to confirm the maximum printing area and margins before printing (@p.12).
- Even when using paper whose sizes and weights are supported by the machine, it may not pass through the machine depending on such factors as paper finish, ambient conditions, and storage conditions. Keep this in mind when using the machine. For more information, consult your dealer.

Do not use the following types of paper, as they can cause jams or misfeeds:

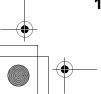
- Extremely thin paper (less than 50 g/m² (14-lb bond))
- Extremely thick or heavy paper (greater than 128 g/m² (34-lb bond))
- · Wrinkled, curled, folded, or torn papers
- Chemically treated paper (such as thermal or carbon paper)
- · Paper coated on its face or back surface
- · Paper having a sticky section or holes (such as an envelop and label paper)

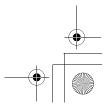


Note:

- Paper with a horizontal grain direction can cause problems with paper feeding. Use paper with a vertical grain direction
- Images are not output onto the entire area of usable print paper.

If paper with a size exceeding the limit of specifications is used, the paper feeding and print quality on such paper are not warranted.









Tips for Better Paper Feeding

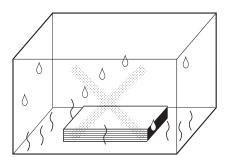
To prevent paper jams and misfeeds, follow the directions below:

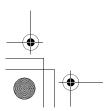
- Set the Paper Feed Pressure Adjustment Lever to the position according to the thickness of the printing paper. (@p.20)
 - Standard paper: Standard position 1 (\times 1), Standard position 2 (\times 2)
 - Thin paper: Thin paper (---)
- Thick paper (such as card stock): Thick paper ()
- Adjust the position of the Paper Jump Wing according to the size of the printing paper. (@p.22)
- Always set the Feed Tray Paper Guide and the Receiving Tray Paper Guide according to the print paper size.(@p.20)
- · Use flat printing paper that is free of folds. If the use of curled paper is unavoidable, place the printing paper so that the curl faces down.
- Paper may stick to the Print Drum (Cylinder) surface if the top margin is too narrow on the original or if the upper portion of the original uses a large amount of ink. To solve this problem, lower the print position to provide a wider top margin or reverse the top and bottom of the original. Restart master making and printing from the beginning when you rotate the original.

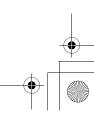
Storing Environment

Store printing paper in a level, dry area. Storing the paper in an excessively humid area can result in paper jams or poor print quality.

After unpacking the printing paper, keep the remaining paper wrapped and store it in a moisture-proof box. It is highly recommended to put silica gel in the paper storage box.

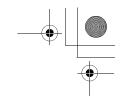








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Before Starting to Use

Originals

Size and Weight Restrictions

Usable originals are as follows.

Unit	Size	Weight
mm	182 mm × 257 mm to 257 mm × 364 mm	50 g/m ² to 107 g/m ²
inch	7 $^{3}/_{16}$ " \times 10 $^{1}/_{8}$ " to 10 $^{1}/_{8}$ " \times 14 $^{5}/_{16}$ "	14-lb bond to 28-lb bond

The maximum printing area is 249 mm \times 352 mm ($8^{3}/_{16}$ " \times 13 $^{17}/_{32}$ "). If the original image size is larger than this limit, you need to reduce the original when making a master.

Note:

- · When printing the following kinds of originals, copy to paper of an available size.
 - Patched or worn originals
 - Wrinkled, curled, folded, or torn originals
 - Transparent originals (such as tracing paper or OHP transparencies)
 - Chemically treated originals (such as thermal or carbon paper)
 - Originals with correction fluid or glue
 - Extremely thin originals (less than 50 g/m² (14-lb bond))
- · You cannot use the following originals on this machine.
 - Multi-layered originals, or multiple originals stapled or clipped
 - Extremely thick originals (greater than 107 g/m² (28-lb bond))

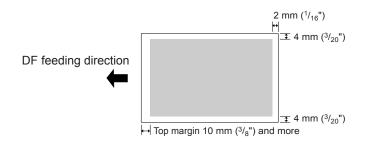
Maximum Printing Areas and Margins

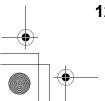
The maximum printing areas are as follows.

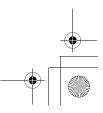
The maximum printing area is read and the originals are printed regardless of the original size and the paper size in the printer.

Unit	Maximum Printing Area	Usable Print Paper Size
mm	249 mm x 352 mm	182 mm x 257 mm to 297 mm x 420 mm
inch	8 ³ / ₁₆ " × 13 ¹⁷ / ₃₂ "	7 $^{3}/_{16}$ " X 10 $^{1}/_{8}$ " to 11 $^{11}/_{16}$ " \times 16 $^{17}/_{32}$ "

No matter which size of originals, be sure to make some margins around the original. Especially a 10 mm (3/8") mm margin on the top side is required for originals. The printing area that is larger than print paper stains the Pressure Roller and smudges the paper.





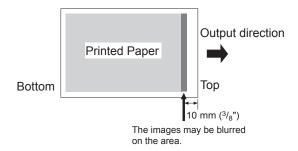






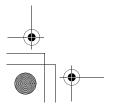
Important!:

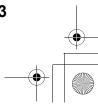
- A 10 mm (3/8") margin on the top side cannot be read when a master is made. If any letter is placed in the margin, a master cannot be made.
- · If the original area is larger than the print paper, always reduce the original to fit it inside of the margins.
- If the printing paper sticks to the Print Drum (Cylinder) or if you find a blur in a 10 mm (3/8") position from the top end, move the print position towards the bottom end.



Materials Not to Be Printed

Do not use the machine in any manner which violates the law or infringes on established copyrights, even when making copies for personal use. Consult your local authorities for further details. In general, use discretion and common sense.

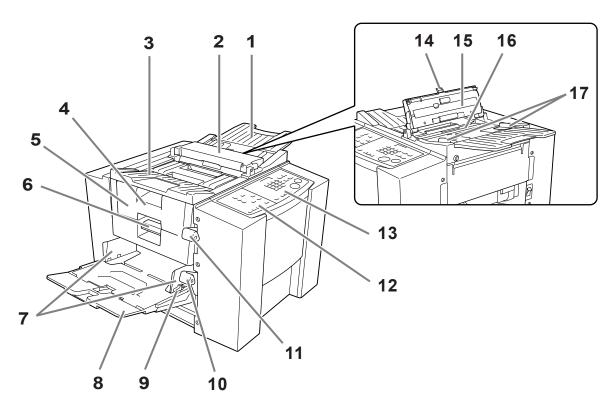




Before Starting to Use

Getting Acquainted

Function and Name of Each Part



1) Original Tray (Pp.20)

Place an original face down.

2) DF Unit

Feeds the original from the Original Tray to the Scanner.

- Master Disposal Unit (Receiving Originals)
 The scanned original is ejected.
- 4) Master Disposal Box Handle (*Pp.54)

Push down the lever when pulling out the Master Disposal Box when the box is filled with discarded masters.

5) Master Disposal Box (\$\mathcal{P}\$p.54)

Holds discarded masters.

6) Master Disposal Unit Release Lever

Grasp the lever to open the Master Disposal Unit when the master jams or others.

7) Feed Tray Paper Guide (*p.20)

Holds and guides paper. Slide to fit to the sides of paper.

8) Paper Feed Tray (*p.20)

Load print paper on this tray.

- 9) Feed Tray Paper Guide Lock Lever (*p.20) Locks the Feed Tray Paper Guides.
- 10) Feed Tray Lock Lever (Fp.20)

Use the lever to lower or lift the Paper Feed Tray.

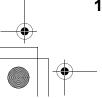
- 11) Paper Feed Pressure Lever (*p.21)

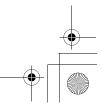
 Adjust the lever according to the paper weight.
- 12) Sub Control Panel (p.17)
- 13) Main Control Panel (p.16)
- 14) Original Release Lever

Use the lever to open the Scanner Unit if paper jams or originals need to be repositioned.

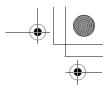
- 15) White Sheet
- 16) Scanner Glass
- 17) Original Guide

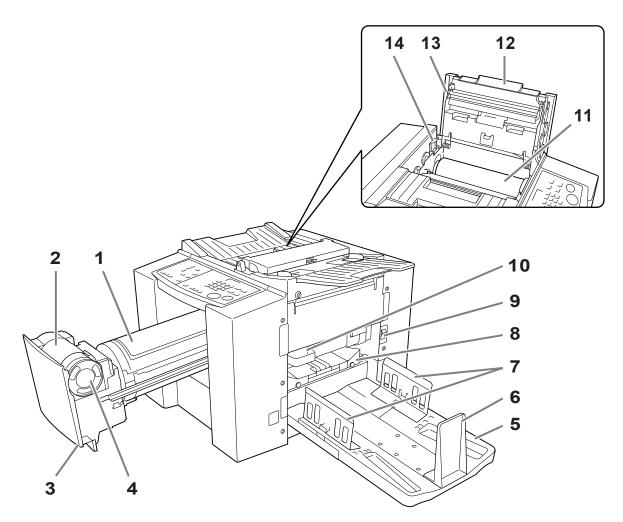
Holds and guides original on the Original Tray. Slide to fit to the sides of original.











- 1) Print Drum (Cylinder) (#p.61)
- 2) Ink Cartridge Holder
- 3) Print Drum (Cylinder) Lever (*p.50) Pull out the Print Drum (Cylinder) by holding this lever.
- 4) Ink Cartridge (*p.50)
- 5) Paper Receiving Tray (*p.22)

The printed copies are output to this tray.

6) Paper Stopper (*p.22)

Stops paper printed and ejected into the Paper Receiv-

Fit up according to the length of paper to be printed.

7) Receiving Tray Paper Guides (#p.22)

Aligns printed paper neatly. Slide according to the width of paper before printing.

8) Paper Jump Wing (*p.22)

Adjust according to the size of paper in order to align printed paper.

9) Power Switch (#p.23)

Turns the machine power ON or OFF.

10) Separation Fan

Pull this out to remove paper jammed on the paper output side.

- 11) Master Roll (*p.52)
- 12) Master Making Unit Lever (*p.52)

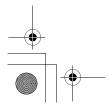
Unlock the lever to open the Master Making Unit.

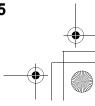
13) Master Making Unit Cover (p.52)

Open the cover to mount the Master into position.

14) Master Roll Lock Lever (\$\tilde{p}\$.52)

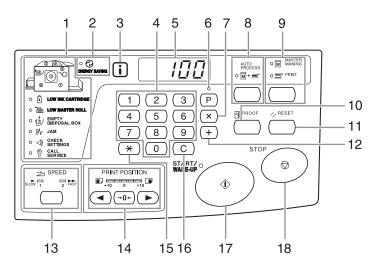
Locks the Master Roll in position.





Before Starting to Use

Control Panel



1) Check & Error Display (\$\tilde{\pi}\$p.64)

Indicates error locations and status.

2) Energy Saving Indicator

Lights when the machine is in the Sleep (energy saving) Mode.

Print operations cannot be performed when this indicator is lit. Press the Start/Wake-up key to activate the machine.

3) i Indicator (*p.64)

4) Print Quantity Keys (0 to 9 Keys)

Use to enter the number of pages to be printed or to enter other numeric values.

5) Print Quantity Display (Error number display)

Shows the number of printed pages, numeric values entered for various settings, and error numbers.

6) P Key/Indicator (@p.39)

Use to set up and retrieve programs. (programed printing)

When activated, the indicator above the key lights.

7) X Key

Use when setting up for programed printing.

8) Auto-Process Key/Indicator (*p.33)

Performs non-stop operation from master-making through printing.

When activated, the indicator above the key lights.

9) Master-Making/Print Change over Key/Indicator

Changes over the machine operation between Master-Making and Print modes. The indicator on the left side of the key shows the current mode.

10) Proof Key (*****p.34)

Use when you want to check print result after adjusting the print position, for example.

This allows you to print sample copies without affecting the value on Print Quantity Display.

11) Reset Key

Returns all settings to the initial settings.

12) + Key

Use when setting up for programed printing or when changing the initial settings.

13) Print Speed Adjustment Key/Indicator (p.36)

Selects the print speed from two levels.

The indicator above the key shows the current speed level.

14) Vertical Print Position Adjustment Keys/ Indicator (*p.35)

Adjusts the print position in vertical direction (within 10 mm (${}^{9}/{}_{8}$ ")) after making a master.

The indicator above the keys shows the offset amount from the center.

To clear the offset amount, press $\rightarrow 0 \leftarrow$.

15) * Key

Use to perform programed printing or to display the error number if an error occurred.

16) C Key

Cancels entered numeric values or resets the counter to zero

17) Start/Wake-up Key/Indicator

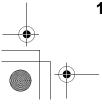
Starts master-making or printing process, or executes specified operations.

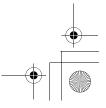
The key is lighted only when the key is active.

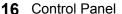
Use to cancel the sleep mode.

18) Stop Key

Stops operation in progress.

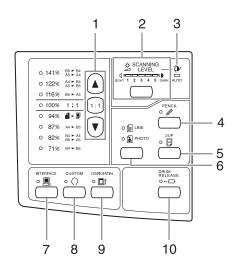












1) Reproduction Size Selection Key (p.28)

When selecting from among the standard reproduction sizes, press **A**/ **V** to switch the selection. The corresponding indicator lights to indicate the current selection. To restore 100%, press 1:1.

2) Scanning Level Adjustment Key/Indicator (**p**p.29)

Selects an original scanning level. The indicator above the key shows the current scanning

3) Auto Scanning Level Adjustment Indicator (**ℱ**p.29)

Lights when you select the automatic scanning level adjustment.

Pencil Mode Key/Indicator (@p.27)

Select for an original written using a pencil. Each time you press the key, the function is switched on and off.

When activated, the indicator above the key lights.

5) 2-UP Key/Indicator (@p.32)

Allows side-by-side printing with a single paper. Each time you press the key, the function is switched on and off.

When activated, the indicator above the key lights.

6) Image Processing Selection Key/Indicator (**☞**p.26)

Each time you press the key, the Image Processing mode is changed.

When the Line mode is selected, 🗐 lights. When the Photo mode is selected, lights. When the Duo (text / photo) mode is selected, both and light.

Interface Key/Indicator (*p.24)

Selects the Online or Offline mode when interfaced with a computer (an interface option is required). The Online and Offline modes are switched over each time the key is pressed.

The indicator above the key lights when Online mode is selected.

8) Custom Key/Indicator (*p.49)

Use when changing the initial settings. When activated, the indicator above the key lights.

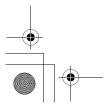
Confidential Key/Indicator (@p.45)

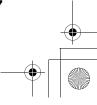
Prevents confidential documents from being copied. Each time you press the key, the function is switched on and off.

When activated, the indicator above the key lights.

10) Print Drum (Cylinder) Release Key/Indicator (*p.50)

Press the key and when the indicator lights, you can pull out the Print Drum (Cylinder) manually. When not lit up, press the key to light up the indicator. And you can pull out the Print Drum (Cylinder).







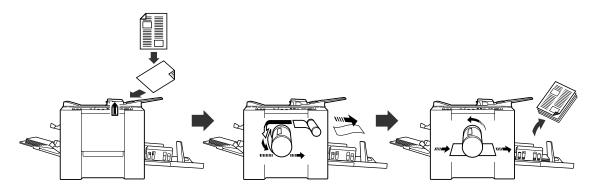
Before Starting to Use

Basic Process

The machine presents the following two basic operational processes:

- Master-making process: to make a master by scanning an original (Master-Making mode)
- Printing process: to actually print the master data on paper (Printing mode)

◆ Process for printing from a paper document

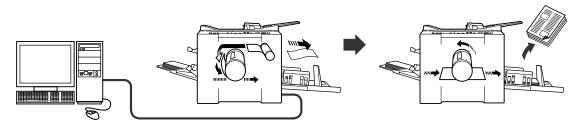


A placed original is scanned by the scanner, and a generated master is rolled around the Print Drum (Cylinder). After a while, sample copy is performed. After checking the print result, enter the number of pages to be printed and start printing.

♦ Process for printing with data generated using a computer

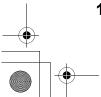
Data sent from a computer is transformed into images, and a generated master is rolled around the Print Drum (Cylinder).

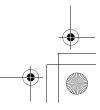
You can send instructions for printing from the computer (through the printer driver).



Important!:

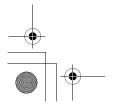
The interface option is required for connection with a computer. *p.9

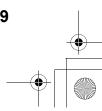






Before Starting to Use





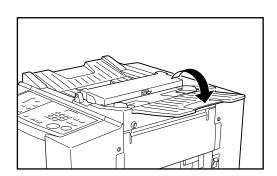




Preparing to Print

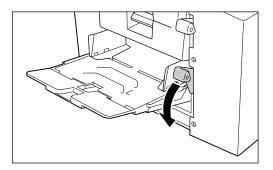
Setting the Original Tray

Open the Original Tray to the outer side.



Setting up the Paper Feed Tray and Loading Paper

1 Lower the Feed Tray Lock Lever to lower the tray.



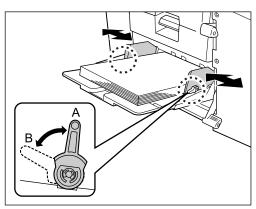
2 Load paper.

Slide and adjust the Feed Tray Paper Guides according to the sides of paper as follows.

- 1) Adjust the "right" Feed Tray Paper Guide to the scale of Paper Feed Tray, and lock the guide using Feed Tray Paper Guide Lock Lever. Before sliding the Feed Tray Paper Guides, release their lock levers.
- **2)** Place paper in the printing orientation.

Note

 See "Paper Recommendations" (*p.10) for appropriate print papers. Fit the "left" Feed Tray Paper Guide to the side of paper, and lock the guide using the lock lever

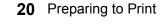


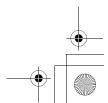
A: Unlock B: Lock

Important!:

- Do not use paper of inappropriate sizes or mix paper of different sizes.
- Be sure to fit the Feed Paper Tray Guides to the sides of paper.

If not, the paper feeding may fail.







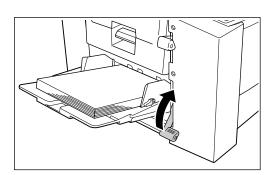




Note:

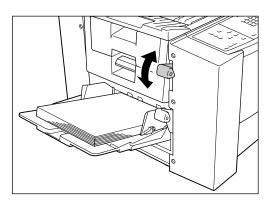
· When using custom-sized paper, load the paper so that its center comes to the center of the Paper Feed Tray, and fit the Feed Tray Paper Guides to the sides of paper.

Flip the lever up to lock paper.



Select the paper feed pressure.

Position the Paper Feed Pressure Lever according to the finish of the paper.



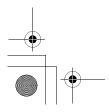
Paper Feed Pressure	
×	When using thin paper
× 1	Standard paper 1: When using coarse paper
× 2	Standard paper 2: When using standard paper
	Thick paper: When using thick paper

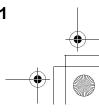
Adding or Replacing Paper

When you add paper or replace with paper of a different size at the time of printing, press the Feed Tray Lock Lever to lower the Paper Feed Tray.

Important!:

- · Do not mix paper of different sizes.
- · After replacing with paper of a different size, reposition the Receiving Tray Paper Guides, the Paper Stopper and paper jump wing according to the size of the replacement paper.
- · When you replaced with the paper of a different quality, adjust the position of Paper Feed Pressure Lever.





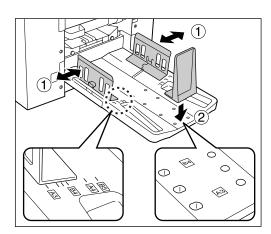


Basic Operations

Setting up the Paper Receiving Tray

1 Position the Receiving Tray Paper Guides and Paper Stopper.

Hold the lower parts of the Receiving Tray Paper Guides and slide them according to the scale on the Paper Receiving Tray. Pull the stopper up to remove it from the Paper Receiving Tray and place it according to the paper size indicator.



Important!:

- For thick paper, position the Receiving Tray Paper Guides a little wider than the actual paper width.
- If you have moved the Feed Tray Paper Guides, reposition the Receiving Tray Paper Guides according to them. If the guides are not correctly positioned, a problem such as a paper jam can occur.

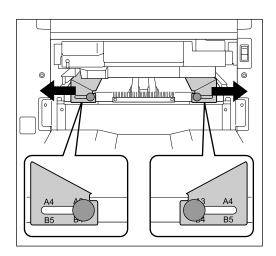
Adjust the Paper Jump Wing.

Adjust the Paper Jump Wing according to the size of paper.

Loosen the setscrew of each Paper Jump Wing, and set it to appropriate position. Then, tighten setscrew to fix each Paper Jump Wing.

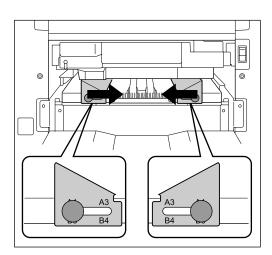
♦ B4(Legal) and larger paper

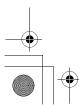
Align the Paper Jump Wing with the outer side. (So that A3/B4 is below the setscrew.)

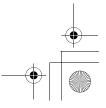


◆ Paper smaller than B4 (Legal)

Align the Paper Jump Wing with the inner side. (So that A4/B5 is below the setscrew.)













Printing from a Paper Document

Turn the power switch to (ON).

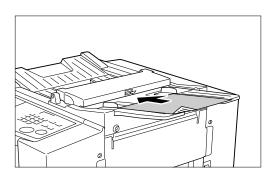
The power switch is located on the far right side of the machine.

Check the display.

Check that any Check & Error Display is not lit up or blinking. ₹p.64

Place an original face down.

Adjust the Original Guide to the width of originals, and place the originals face down.



Note:

· You can place one sheet of original on the DF

Press the Master-Making / Print Change over key.

The machine switches into the master-making mode.

Make necessary settings.

Make various settings including image processing mode selection.

@p.26~@p.33

Press the \diamondsuit key.

The original is scanned, and a master is made. A proof copy is printed.

Check the proof copy; e.g., print position and density.

Enter the number of pages to be printed, using the Print Quantity keys.

The specified number is shown on the Print Quantity Display.

Note:

· If you enter an incorrect number, press the C key to cancel it and reenter the number of pages.

Press the \diamondsuit key.

The specified number of pages is printed.

· If printing is stopped halfway, check the display. @p.64~@p.72

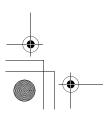
Press the $\sqrt{\ }$ key.

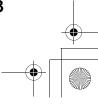
After printing has finished, return the settings to the initial settings.

Note:

 After printing is completed, the master remains on the Print Drum (Cylinder). To protect confidential documents from unauthorized duplication, use the Confidential feature to discard the master after printing. (@p.45)

1 Remove the printed paper.



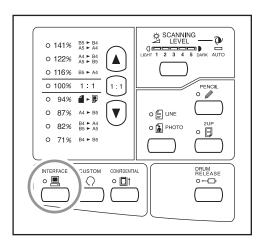




Printing Data You Have Created on a Computer (Optional Kit Required)

1 Turn the power switch to | (ON).

The power switch is located on the far right side of the machine.



Important!:

When you press the key while the indicator is blinking, the data being received or waiting for output will be deleted.

Tip:

About the indicator
 The lighting / blinking of the indicator informs you of the conditions of this machine and data receiving conditions.

Lightning of Indicator	Description
∘ <u>■</u> lighting	The data from your computer can be received.
• going-out	The receiving of data is disabled.
₩ III blinking (fast)	Receiving

Lightning of Indicator	Description
□ blinking (slow)	Waiting for output instruction. (The received data, after being expanded, is waiting for output instruction.) Or the expanded data is in the master-making or printing process.

? Check the paper size.

To change the paper, replace the paper on the Paper Feed Tray. (**p.21)

Send document data from the computer.

When the machine is receiving data, the 🗏 indicator blinks.

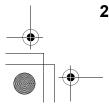
When data reception is finished, the machine automatically starts printing according to the settings of the printer driver.

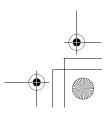
Important!:

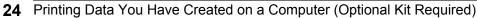
 You cannot make various settings including image processing mode, by operating the machine. Only the printer driver allows such settings. For details, see the User's Guide of the printer driver.

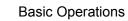
Note:

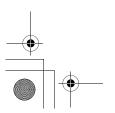
- · The data are printed by the order of receiving.
- You can also use the printer driver to stop the master-making or printing process at any point. (For details, see the User's Guide of the printer driver.)
- When you press the key while the lamp is blinking, you can delete the data waiting for output or being received.

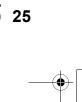




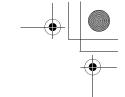












Functions for Master-Making

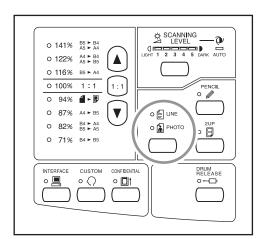
Selecting the Image Processing Mode

[Line/Photo/Duo]

In order to make a quality master, select an appropriate mode depending on whether originals contain only Line (text), photos, or both of them.

Press the key to select the Image Processing mode.

Each time you press the key, the indicator lights in the order: \blacksquare Line \rightarrow \blacksquare Photo \rightarrow \blacksquare \blacksquare Duo



The table shows which type of originals is appropriate for each mode.

Mode	Type of Originals
 Line	Only text contained; e.g., word processing file printout, newspaper
A Photo	Only photos contained
🗐 🚡 Duo	Both text and photos contained

Important!:

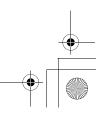
- · With the Photo mode or Duo mode selected, you cannot select "Auto" for the scanning level. Perform manual adjustment. ☞p.29
- · You cannot use the Image Processing mode and Pencil mode together.

Note:

· Select the Pencil mode when printing from an original written with a pencil.

☞p.27





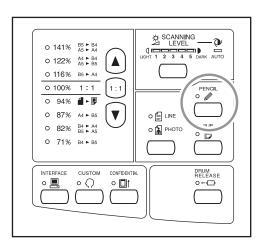




Scanning Originals Written with Pencils [Pencil]

This function allows clearer printing from such originals containing faint contents such as those written with pencils.

Press the / key to turn on its indicator.

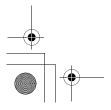


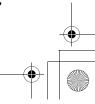
Important!:

- You cannot use the Pencil mode and Image Processing mode at the same time.
- · When in the Pencil mode, adjust the scanning level manually. You cannot select "Auto". ℱp.29

Note:

 To clear the Pencil mode, press the key again to turn off its indicator or select another type of image processing mode.







Functions for Master-Making

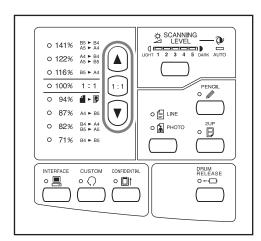


You can enlarge or reduce originals when making a master. Specify the standard ratio to enlarge or reduce an original.

Press the \triangle/∇ key to specify the enlargement / reduction ratio.

Each time you press the key, the indicator of the selected ratio lights.

To restore 100%, press the 1:1 key.



Note:

An original must have the 10 mm (3/8") or larger margin at its top end when it is placed on the Original Tray. Top margin is not added even if you have assigned Border Increase (the 94% Reduction).

Tip:

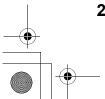
Enlargement / reduction ratio may differ according to the machine's specification (Set with unit of "mm" or "inch").

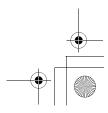
Unit with "mm"

0	141%	B5 ► B4 A5 ► A4	
0	122%	A4 ► B4 A5 ► B5	
0	116%	B5 ► A4	
0	100%	1:1	
0	94%	4 ► 🖟	
0	87%	A4 ► B5	
0	82%	B4 ► A4 B5 ► A5	

Unit with "inch"

0	154%	
0	129%	5¹/ ₂ x8¹/ ₂ ► 8¹/ ₂ x11
0	121%	
_	100%	
0	94%	BORDER INCREASE
0	78%	$8^{1}/_{2}x14 \triangleright 8^{1}/_{2}x11$
0	65%	$8^{1}/_{2}x11 \rightarrow 5^{1}/_{2}x8^{1}/_{2}$
0	61%	$8^{1}/_{2}x14 \triangleright 5^{1}/_{2}x8^{1}/_{2}$









Scanning Originals Having Faint or Dark Contents [Scanning Level Adjustment]

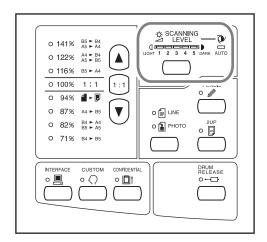
You can adjust the scanning level according to the density of text and images on originals.

With "Auto" selected, the density of originals is pre-scanned and the optimum scanning level is automatically set. Manual adjustment allows you to select from five levels.

For originals containing faint text, select a high level (4 or 5). For such colored (coloured) originals as newspapers, select a low level (1 or 2).

Press the $\overset{*}{\supset}$ key.

Each time you press the key, the Scanning Level Adjustment Indicators light in the order of $1 \rightarrow 2 \rightarrow 3 \rightarrow$ $4 \rightarrow 5 \rightarrow Auto \rightarrow 1$ and so on.



Important!:

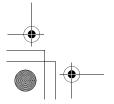
- · If you have adjusted the scanning level, remake a master and print several pages to check the print
- You can select "Auto" only for the Line mode. You cannot select "Auto" with the Photo, Duo, or pencil mode selected.

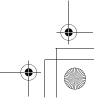
Mode and Scanning Level Relationship

Mode	Type of Originals	Scanning Level Adjustment	
		1 - 5	Auto
■ Line	Only text contained; e.g., word processing file printout, newspaper	Available	Available
Photo	Only photos contained	Available	Not Available
□ □ Duo	Both text and photos contained	Available	Not Available
	Containing faint text written with pencils	Available	Not Available

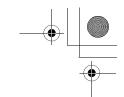
Note:

· The Custom Setting mode allows you to change the initial settings of the scanning level. ₹p.46









Functions for Master-Making

Printing Originals Side-by-Side [2-Up Printing]

The same or different originals can be printed side by side.

This is called 2-Up Printing.

2-Up Printing is divided between "Single-original printing" and "Two-original printing".

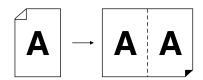
Important!:

- The print paper size that can be used for this function is B4 or A4 (Legal or Letter) only.
- Set the paper size to be used in User mode (No.12) in advance. @p.47

Single-Original Printing and Two-Original Printing

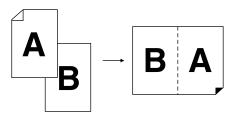
Single-Original Printing

This prints from the same original and outputs onto a single sheet of paper side by side.



Two-Original Printing

This prints from two different originals and outputs onto a single sheet of paper side by side. The center of printed copies will be free from the shade of originals.

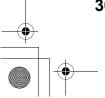


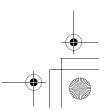
Important!:

• Place the second original on the Original Tray during the "Interval Time". The "Interval Time" is 30 seconds.

Note:

- occur. ₹p.66
- · When a paper jam error occurs for the second original, the second page is not scanned properly. Scan again from the first original.









Restrictions on 2-Up Printing

2-Up printing restricts the sizes of paper to be used, paper orientations, and the enlargement / reduction ratios.

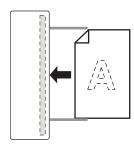
Enlargement / reduction ratio

The table shows enlargement / reduction ratios suitable for 2-Up printing.

		Original	
		B5	
Print Paper	B4	100%	
	A4	82%	

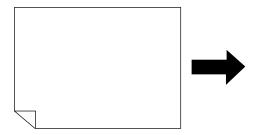
Orientation of originals

Always place originals in the orientation below.



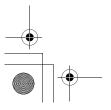
Orientation of print paper

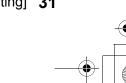
Always place print paper in the orientation below.



Note:

- · Originals must have sufficient margins. Insufficient margins result in inappropriate page layout.
- The 10 mm (³/₈") top margin is kept regardless of the enlargement/reduction ratio.
- · For two-original printing, the same functions are set for each original. You cannot set separate functions for each





Functions for Master-Making



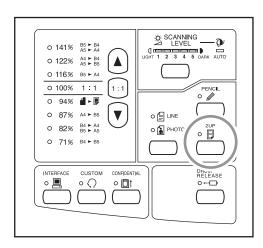
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Operational Procedure

Place an original.

Place an original on the Original Tray.

Press the B key to turn on its indica-



Note:

turn off its indicator.

Make necessary settings.

Select the Image Processing, Reduction Ratios and other functions as necessary. **ൌ**p.26~**ൌ**p.31

Start the master-making process.

◆ Single-original printing

the original again within the interval time. Press the **\$\psi\$** key.

◆ Two-original printing

Press the **\$\Phi\$** key to start scanning the first original. Place the second original within the interval time. Press the <a> key.

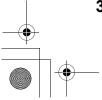
Enter the number of pages to be printed, using the Print Quantity keys.

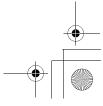
Check the quality of proof copy. Enter the number of pages for actual printing. The specified number is shown on the Print Quan-

Press the \diamondsuit key.

tity Display.

2-Up printed copies are output.









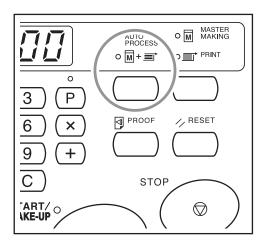


Automatic Printing [Auto-Process]

Master-making and printing can be performed automatically in sequence. When "Auto-Process" is selected, simply enter number of copies to print, then press the \oplus key.

Press the ⊞+≡ key to turn on its indicator.

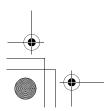
With the $\[\]$ indicator tuned on, press the $\[\]$ + $\[\]$ key.

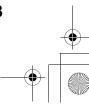


Note:

- · When printing is completed, Print Quantity will restore the number originally entered.
- again to turn off its indicator.
- If you select Auto-Process when the

 indicator is turn on, the Auto-Process will be activated from the next master after the content of the master currently loaded on the Print Drum (Cylinder) is printed.
- Using the Custom Setting mode, you can make a setting that "Auto-Process" is always set to "ON" when you reset or start the machine. ℱp.46







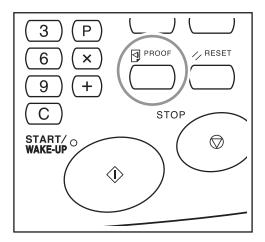


Producing Proof Copies [Proof]

After adjusting the print position and density, you can produce proof copies to check the print quality.

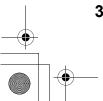
Press the 🛚 key.

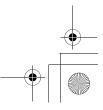
Proof copy does not affect the number shown on the Print Quantity Display.



Note:

• By holding down the 🛽 key, you can continuously perform proof copy.









Adjusting the Print Position [Print Position Adjustment]

You can adjust the print position in the vertical direction using the Print Position Adjustment keys. Also, you can adjust it in the horizontal direction by sliding the Feed Tray Paper Guides. Adjustment range

Vertical direction: ±10 mm (±3/8")

Horizontal direction: ±10 mm (±3/8") (for B4/Legal paper)

When using paper A3, you can adjust the horizontal position ±3 mm.

Important!:

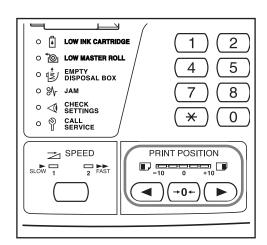
· After adjusting the print position, perform proof copies to check the new print position. **₽**p.34

Adjusting the Vertical Position

Press the ◀/ ▶ key to adjust the vertical position.

Key	Adjustment methods
4	Each press shifts the print position downward in steps of about 1 mm (1/32").
•	Each press shifts the print position upward in steps of about 1 mm (1/32").
→0←	Returns the print paper to the original position.

You can check the current print position in vertical direction by the Vertical Print Position Indicator.

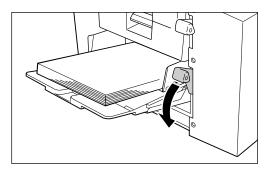


: Shifts the print position downward.

: Shifts the print position upward.

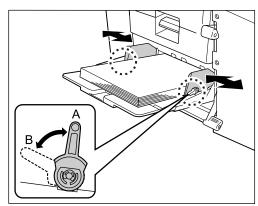
Adjusting the Horizontal Position

Lower the Feed Tray Lock Lever to release the Paper Feed Tray.



Adjust the horizontal position by sliding the Feed Tray Paper Guides.

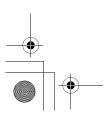
- 1) Unlock the Feed Tray Paper Guide Lock Levers.
- Adjust the horizontal position by sliding the Feed Tray Paper Guides.
- 3) Lock the Feed Tray Paper Guide Lock Levers.



A: Unlock B: Lock

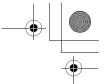
Important!:

· If you have adjusted the horizontal position, also adjust the Receiving Tray Paper Guides.









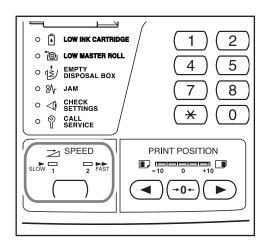
Functions for Printing

Changing the Print Speed [Print Speed Adjustment]

You can adjust the print speed to one of two levels; 60 pages per minute or 90 pages per minute.

Press the key to adjust the print speed.

Each time you press the key, the print speed is changed in the order of $1 \rightarrow 2 \rightarrow 1 \rightarrow$ and so on.



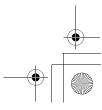
The table shows the relationship between the indicator segment position and print speed.

Segment Position	1	2
Print Speed (Number of pages per minute)	Approx. 60	Approx. 90

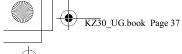
Note:

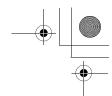
· The Custom Setting mode allows you to change the initial setting for the print speed. ℱp.46

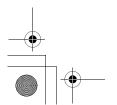


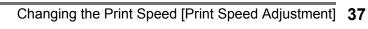


Functions for Printing







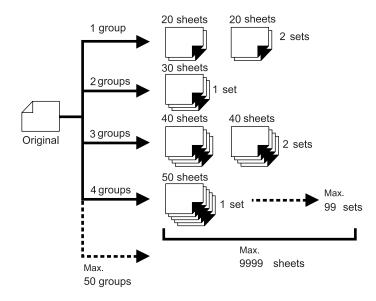






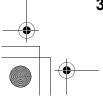
Automatic Sorting into Groups [Program]

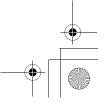
"Program" features printing into multiple groups of sets from a single original document. A maximum of 50 groups can be created, each having up to 99 sets. Each group can be up to 9999 pages. The machine can be configured to specify how many pages (sheets) per set, then how many sets are to be created for each group.



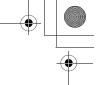
There are two ways to print in sets using "Program" printing feature.

- Program, then print (without saving the settings)
- · Retrieve a saved program, then print (when program is registered)





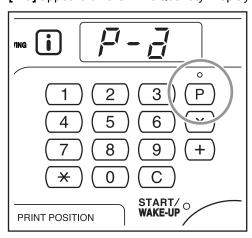




Setting Up for Programed Printing (When Printing Without Registering)

Press the P key to turn on its indicator.

[P-a] appears on the Print Quantity Display.



Note:

 Mode switches between [Program Settings] and [Cancel Program] by pressing the P key.

Press the + key.

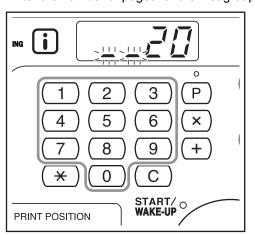
The print quantity entry mode is started.

Note:

• Press X key to return to the previous step.

Enter the number of pages to be printed, using the Print Quantity keys.

Enter the number of pages for the first group.

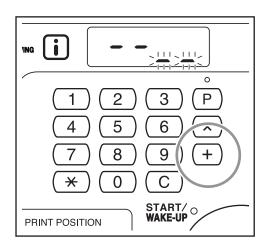


Note:

 If you enter an incorrect number, press the C key to clear the number, then enter the correct number.

Press the + key.

The number of set entry mode is started.



Enter the number of set using the Print Quantity keys.

To set the next group, go to step 6. To finish the setting and start printing, go to step 7.

Note:

- If you enter an incorrect number, press the C key to clear the number, and then enter the cor-
- If you do not enter a number, 1 (a single set) is selected.

Press the + key.

The print quantity entry mode for the second group is started.

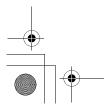
Repeat steps 3 through 6 to specify the number of pages and sets for each group.

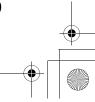
Important!:

• To save the current program settings, see "Saving Programs" (@p.41) for further information. Once printing is finished, the settings cannot be saved.

Place an original.

Adjust the Original Guide to the width of original, and place the original face down.







•

Advanced Features

8 Press the Master-Making / Print Change over key.

The machine switches into the master-making mode.

Make necessary settings.

Make various settings as necessary. You can set the following functions:

- Image Processing Mode
- Pencil
- · Scanning Level Adjustment
- Enlargement/Reduction
- Auto-Process
- · 2-UP Printing

1 Press the \diamondsuit key.

A proof copy is printed. Check the print result, and if necessary adjust the print position and other items.

11 Press the Φ key again.

Printing is started with the last programed group.

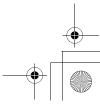
Important!:

When printing is finished for all groups, the program content is cleared. However, it is not cleared if "Auto-Process" has been set to ON.

Note:

- Printing is stopped each time a routine for one set is finished. Remove printed pages from the Paper Receiving Tray or put separation paper.
- To interrupt printing, press the ⊘ key. Press the ⋄ key to resume printing.









Saving Programs

If you have stored the frequently-used program settings in memory, you can retrieve them for later printing. Six programs can be stored.

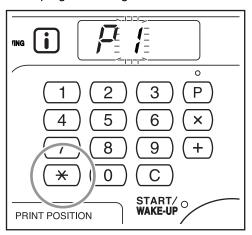
Set the program.

Enter the required program settings from the Con-

For details on the setting operations, refer to the steps 1 (@p.39) through 6 (@p.39).

Press the \times key.

Store program settings.



Enter the program number using the Print Quantity keys.

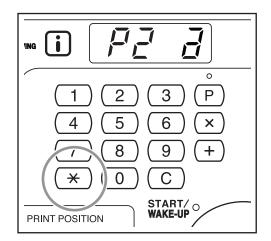
Select a program number from 1 to 6.

Important!:

- When a program number that has already been stored is selected, [a] is displayed on the rightmost digit.
- Since selecting a number that has already been stored overwrites the previous settings, please confirm the settings on the display before saving on the same number.

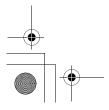
Press the X key.

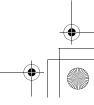
Program setting is stored and [Program number] is displayed.



Note:

• After storing a program, pressing the P key to finish saving the program. By pressing \diamondsuit key, you can print with a stored program.





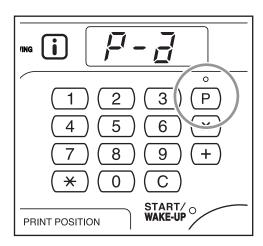
Advanced Features



Retrieving a Program

Stored programs can be retrieved for printing.

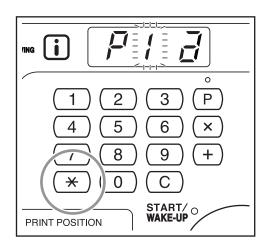
1 Press the P key to turn on its indicator.



Note:

 To cancel the program mode, press the P key once again.

Press the ★ key.



3 Enter program number using the Print Quantity keys.

The registered program is retrieved.

Note:

You cannot enter an unregistered program number.

Place an original.

Adjust the Original Guide to the width of original, and place the original face down.

5 Press the Master-Making / Print Change over key.

The machine switches into the master-making mode.

Make necessary settings.

Make various settings as necessary. You can set the following functions:

- Image Processing Mode
- Pencil
- Scanning Level Adjustment
- · Enlargement/Reduction
- Auto-Process
- 2-UP Printing

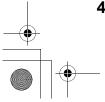
7 Press the \diamondsuit key.

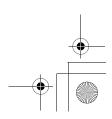
A proof copy is printed. Check the print result, and if necessary adjust the print position and other items.

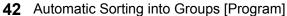
Printing is started with the last programed group.

Note:

- Printing is stopped each time a routine for one set is finished. Remove printed pages from the Paper Receiving Tray or put separation paper.
- To interrupt printing, press the ♦ key. Press the key to resume printing.
- When printing is finished for all groups, the program content is cleared. However, it is not cleared if "Auto-Process" has been set to ON.









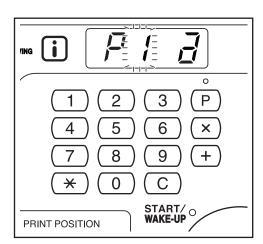


Making Changes to Stored Programs

Modifying its settings.

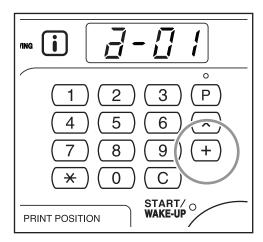
Retrieve a program to modify.

Follow steps 1 through 3 in "Retrieving a Program" (@p.42)



Press the + key.

Displays the stored number of pages or sets. Press the + key repeatedly until the value to modify appears.



- Press the C key and the Print Quantity keys to change the number of pages or sets.
- Press the \times key.

Program setting is modified.

Store a program.

Changed program settings are stored. To overwrite the retrieved program, press the * key again.

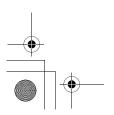
To store on the new program number, enter and display the program number using the Print Quantity keys and press the *\text{\text{\text{key}}} key.

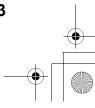
Important!:

· If you select an already stored program number, the existing settings are overwritten by your new settings.

Note:

• See "Saving Programs" (@p.41) for details on how to store a program.



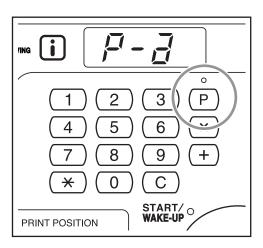




Advanced Features

Clearing Programs

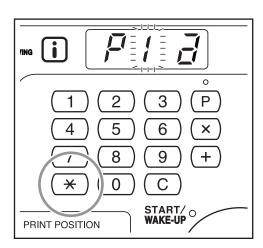
1 Press the P key to turn on its indicator.



Note:

 To cancel the program mode, press the P key once again.

2 Press the X key.



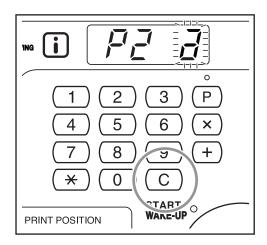
3 Enter the program number to clear using the Print Quantity keys.

Note:

• You cannot enter an unregistered program number. Select a stored program number.

⚠ Press the C key.

"a" blinks in the print quantity display.

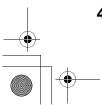


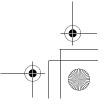
Important!:

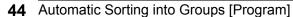
• Press the [□] key to cancel clearing of program.

5 Press the Φ key.

Selected program settings are cleared. Press P key to cancel program mode.











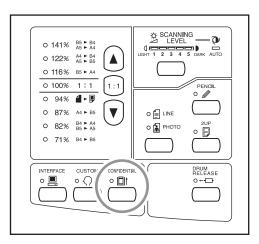
Protecting Confidential Documents [Confidential]

After printing is completed, the master remains on the Print Drum (Cylinder) and is ready for printing another set of copies. To protect confidential documents from unauthorized duplication, use the Confidential feature to discard the master after printing.

Confirm that printing has ended.

Printing should be completely finished.

Press the 🔲 key to turn on its indicator.



Note:

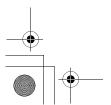
• To clear the mode, press the 📋 key to turn off its indicator.

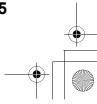
Press the \diamondsuit key.

The current master is discarded and replaced with a blank one.

Note:

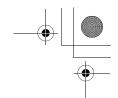
· After the discard and replacement, the Confidential mode is cleared.







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Advanced Features

Changing the Initial Settings [Custom Setting Mode]

You can change the initial settings that are restored when the power is turned on or when the $/\!\!/$ key is pressed. The customised settings are effective until they are changed again.

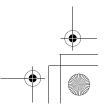
The changeable items and their descriptions are as follows:

__: Initial settings (factory default)

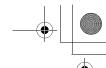
Items You Can Change

Item	Changeable Items		Р	arameter			
No.	Onlangeable items	0	1	2	3	4	5
1	Print Speed Change the initial setting for the print speed.	1	<u>2</u>				
2	Auto-Process Change the initial setting for the Auto-Process.	<u>OFF</u>	ON				
3	Scanning Level Change the initial setting for the scanning level.	1	2	3	4	5	Auto
4	Original Mode Change the initial setting for the Image Processing mode.	Line	Photo	Duo	Pencil		
5	First Print Vertical Position Setting Changes the first print printing position according to the settings of the Vertical Print Position Adjustment Keys.	<u>OFF</u>	ON				
6	Energy Saving Function The machine enters the Sleep mode if it is not used for a certain period of time. Set the time that must elapse before the machine enters the Sleep mode.	5 minutes	15 minutes	30 minutes	60 minutes	90 minutes	OFF
	Note:						
	When the machine is in the Sleep (energy saving) Mode, only the Sleep Indicator and the Start/Wake-up key light on the control panel. The other indicators and counters do not light. When the machine is in the Sleep Mode, it can only receive original data from a PC, and all other functions operate as if the machine has its power turned off. Press the Start/Wake-up key to activate the machine.						





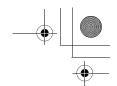




Advanced Features

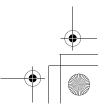
Item	Changaghla Itama	Parameter Selection							
No.	Changeable Items	0	1	2	3	4	5		
7	Minimum Print Quantity Specify the minimum number of pages to be printed from one master. If a number lower than the specified minimum number is entered, the master-making process is not executed.	0 page	10 pages	20 pages	30 pages	40 pages	50 pages		
	Note:								
	When connecting to a PC The minimum print quantity is disabled when outputting data from a PC. (Any number of sheets can be output, regardless of the setting.)								
8	Beep Sound Customise the beep sound ON/OFF setting during key operation or during error occurrence. • Level 2 The beep sounds at all preset occasions such	Level 2	Level 1	Level 0					
	as when a key is operated and when an event occurs or ends.								
	Level 1 The beep sounds only when an error occurs, when item setting has completed, when a pull-out operation is enabled.								
	Level 0 No beep sounds at any occasion.								
9	Return Print Counter Setting Sets the print counter displayed after printing is complete. If "Do Not Return" is set, the print counter returns to "0". If "Return" is set, the print counter returns to the number of pages previously printed.	Do Not Return	Return						
	Note: • If "Auto-Process" is ON, Print Quantity will restore the number originally entered.								
10	Return Program Print Setting Select "Return" to perform program printing for multiple originals in a row.	Do Not Return	Return						
11	Return 2-Up Printing Setting Select "Return" to perform 2-Up printing for multiple originals in a row or to always use 2-Up printing.	Do Not Return	Return						
12	2-Up Printing Paper Size Set the printing paper size.	A4/ (Letter)	B4/ (Legal)						





Advanced Features

Item	Changeable Items	Parameter Selection						
No.	o.		1	2	3	4	5	
30	Total Quantity Display The total number of pages printed with the machine is displayed.	Follow steps 1 and 2 of the "Changing Procedure". p.49 The total number of counter is shown on the Display. This number is alternately displayed on the two screens, consisting of an underbar + 3-digit number and 4-digit number. Example: If 1,234,567 pages:						
31	Master Quantity Display The total number of masters generated with the machine is displayed.							
32	Average Display Function Displays the average number of pages printed for each master made with the machine.	_123 →	4567					
99	Initial Setting Restoration Reset all Custom Setting mode settings to the initial settings (factory default).	Follow s p.49	teps 1 and	d 2 of the	"Changin	g Proced	ure".	

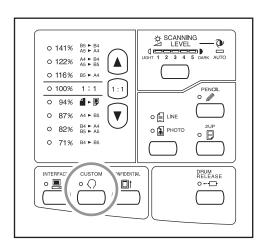






Changing Procedure

Press the Ω key to turn on its indica-

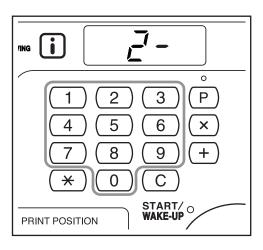


Note:

· To exit the Custom Setting mode, turn off the indicator by pressing the Ω key again.

Enter an item number to be changed, using the Print Quantity keys.

The Print Quantity Display shows the selected item number.



Note:

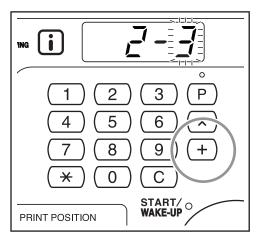
- · To restore the initial settings for the Custom Setting mode, enter "99" and press the + key, and then press the \$\psi\$ key.
- Press the + key to view the Total Quantity Display (30), Master Quantity Display (31), and Average Display (32).

The display is switched between the first 3 digits and the last 4 digits each time you press the

Press the + key.

Pressing this key allows you to select a parameter

The currently set parameter number blinks.

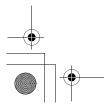


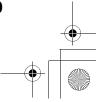
Enter a parameter number using the Print Quantity keys.

If you want to change multiple parameters, press the + key and repeat steps 2 through 4 for them.

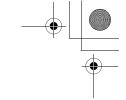
Press the \diamondsuit key to complete the settings.

The changed contents are programed and the normal mode is restored.









Replacing and Disposing Consumables

Replacing the Ink Cartridge

When the Ink Cartridge becomes empty, the Replace Ink Cartridge Indicator lights. Replace with a new Ink Cartridge.

⚠Caution:

· Because ink may have adhered to the outlet surface of the Print Drum (Cylinder), be careful not to get your hands and clothes dirty.

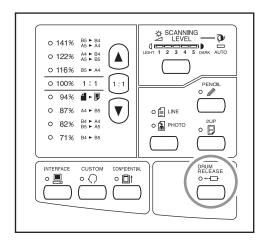
Rinse your hand using a detergent immediately if stained with ink.

Important!:

- For the lnk Cartridge, it is recommended to use the products specified by RISO.
- · Before replacing the Ink Cartridge, turn the machine on.

Press the ○-□ key.

Make sure that the Print Drum (Cylinder) Release indicator is tuned on.

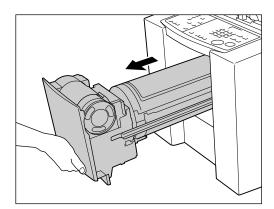


Important!:

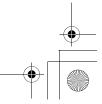
• If you forcibly pull out the Print Drum (Cylinder) when its release indicator is turned off, the Print Drum (Cylinder) may be damaged.

Pull out the Print Drum (Cylinder).

Grasp the Print Drum (Cylinder) Handle and pull out the Print Drum (Cylinder) until it stops.





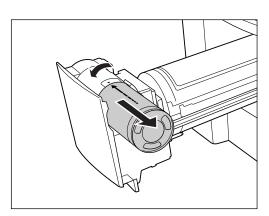






Pull the empty Ink Cartridge out of the holder.

Turn the Ink Cartridge to the left, and then pull it out.

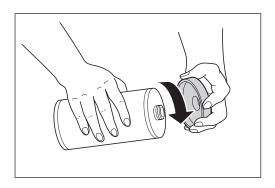


Note:

· Dispose the depleted lnk Cartridge according to the disposal rule of your local community. ₹p.56

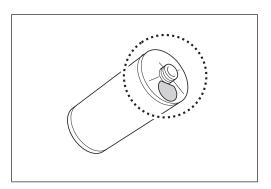
Remove the cap from a new lnk Cartridge.

Turn the cap of the Ink Cartridge to remove the сар.



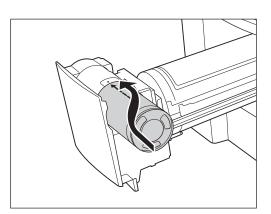
Important!:

· Do not touch or give impact to the outlet surface of the new Ink Cartridge. Do not remove the label attached to the outlet surface of the Ink Cartridge.



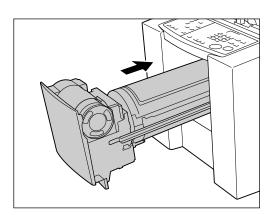
Insert the new lnk Cartridge.

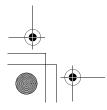
Align the arrow of lnk Cartridge with the ▼ mark on the holder, and push the Ink Cartridge until it stops.

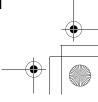


Return the Print Drum (Cylinder) to the original position.

Insert the Print Drum (Cylinder) until it stops.







Replacing and Disposing Consumables

Replacing the Master Roll

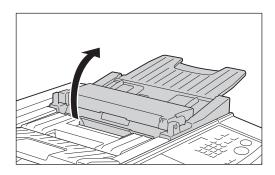
When the entire Master Roll is consumed, the Replace Master Roll Indicator lights. Replace with a new Master Roll.

Important!:

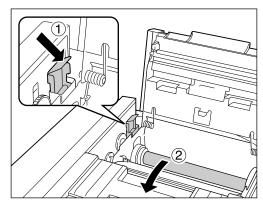
- For the Master Roll, it is recommended to use the products specified by RISO.
- · Before replacing the Master Roll, turn the machine on.

1 Open the Master Making Unit Cover.

Lift and open the Master Making Unit Cover by holding the Master Making Unit Cover Handle.



Press the Master Set Lever to remove the depleted master core.

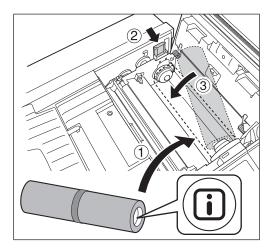


Note:

 Dispose the depleted Master Roll according to the disposal rule of your local community.
 p.56

Install a new Master Roll.

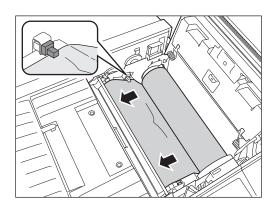
Remove the shrink-wrap (transparent film) from the new Master Roll (Do not remove the wrapper yet.), and place the roll so that the i mark on the master core comes to the front.



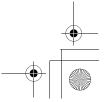
Insert the leading edge of the Master Roll into its entrance under the Master Guide.

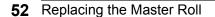
Insert the leading edge under the Master Guide (green section) until it steps.

Make sure the master passes under the sensor.





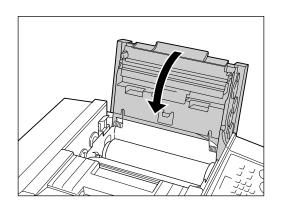


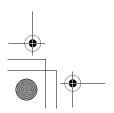


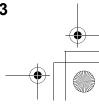




Close the Master Making Unit Cover.







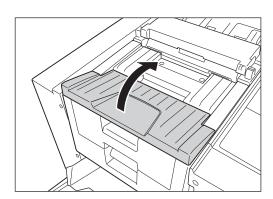
Replacing and Disposing Consumables

Emptying the Master Disposal Box

The used master is disposed in the Master Disposal Box.

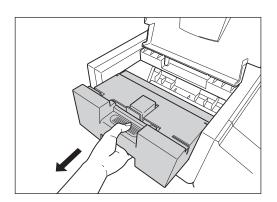
When the Master Disposal Box is filled with ejected masters, the Empty Disposal Box Indicator lights. Remove the ejected masters from the Master Disposal Box and discard them. When replacing the Master Disposal Box after removing it, wait at least five seconds before replacing it.

Open the Master Disposal Unit Cover.



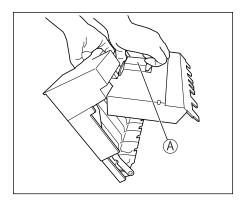
Pull out the Master Disposal Box.

Grasp the Master Disposal Box Handle, and pull out the Master Disposal Box.



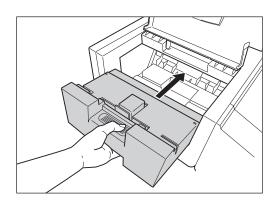
? Discard the ejected masters.

While holding down the levers, raise the tab (A), open the cover, and discard the used masters. Restore the tab, and close the cover.



▲ Replace the Master Disposal Box.

Grasp the Master Disposal Box Handle, and insert the Master Disposal Box until it stops.

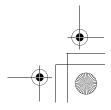


Important!:

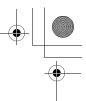
 Once you pull out the Master Disposal Box, make sure to empty it before placing it into position.

Note:

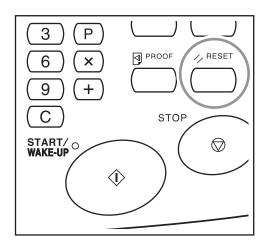
 Dispose the ejected masters according to the disposal rule of your local community. *p.56



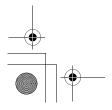


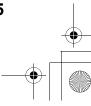


Press the Reset key.

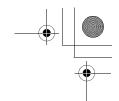


Close the Master Disposal Unit Cover.





Replacing and Disposing Consumables

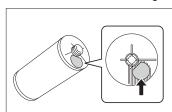


Disposal of Used Consumables

Dispose the depleted Ink Cartridges, Master Rolls and ejected masters according to the regulations in your local community. If required, separate the specific components using the following procedures to dispose them properly.

Ink Cartridge

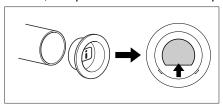
Remove the label (metal included) at the arrow from the outlet surface of the lnk Cartridge, and then dispose them separately. Because ink may have adhered to the outlet surface of the lnk Cartridge, be careful not to get your clothes dirty.



Part Name	Material
Ink Cartridge	Plastic (polypropylene or polyethylene)
Label	Plastic (metal included)
Ink	Petroleum carbon hybrid, water, and pigment

Master Core

A metallic component has been attached to the bottom of the end section having the i mark stamped. Remove the plastic cap from the Master Core, and peel off the metallic component from the rear surface of the cap.



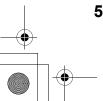
Part Name	Material		
Master core	Paper		
Master	Plastic and Japanese paper		
Plastic cap	Plastic (polypropylene)		
Label	Plastic (metal included)		

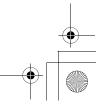
Ejected Master

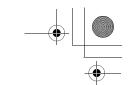
Part Name Material			
Master material	Plastic and Japanese paper		
Ink material	Petroleum carbon hybrid, water, and pigment		

Note:

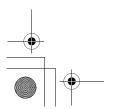
 As it is a chemical compound made of carbon and hydrogen, it is changed into carbon dioxides and water when combusted completely.

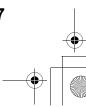






Replacing and Disposing Consumables









Safety Guide - Cleaning

This section describes the precautions to be observed when cleaning the machine. Read this section before cleaning the machine.

AWARNING:

- Before cleaning any part of the machine, turn off the power.
- · Do not remove any fixed covers.
- · Contact your service representative immediately if you suspect any dangerous situation or have questions or problems with the machine.
- · Contact your service representative before moving the machine.
- · Do not allow unauthorized persons to make adjustments or repairs.

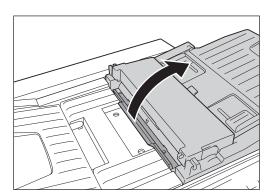
⚠ Caution:

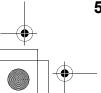
- The machine has precision moving parts inside. Do not handle the machine in any other way than described in this guide.
- · Be careful of the edge of metal parts, otherwise it may cause an injury.
- Do not make any modifications to the machine or remove any parts.
- Neither RISO nor its dealer is responsible for maintenance service performed by non-RISO-authorized personnel.

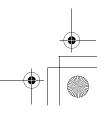
Cleaning

Thermal Print Head

Clean the Thermal Print Head each time you replace the Master Roll. Grasp the Master Making Unit Cover Lever, and open the Master Making Unit Cover.



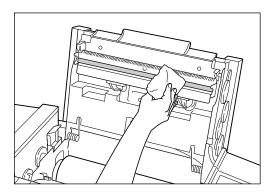








Gently wipe the Thermal Print Head (golden section enclosed by green) in the back of the unit several times with a soft cloth or tissue.



⚠Caution:

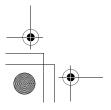
• Since the Thermal Print Head may be heated, do not touch it directly with your fingers.

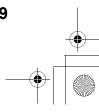
Important!:

- Since the Thermal Print Head is a very delicate part, avoid shocks or scratches with a hard object.
- Since the Thermal Print Head is susceptible to (damage by) static electricity, please be sure to remove the static electricity charged in the body before cleaning.

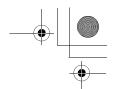
Note:

• For more effective cleaning, dampen a soft cloth or tissue with a small amount of alcohol before wiping the Thermal Print Head.





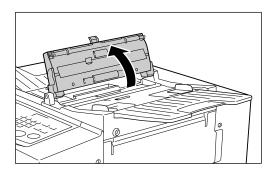




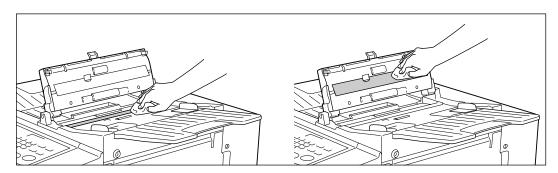
Maintenance

Scanner Glass and White Sheet of the DF Unit

Grasp the Original Release Lever and open the Scanner Cover.



Gently wipe and clean the Scanner Glass and the White Sheet with a soft cloth or tissue.

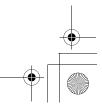


Important!:

· Since the Scanner Glass is very delicate, avoid shocks or scratches with a hard object.

Note:

• For more effective cleaning, dampen a soft cloth or tissue with a small amount of alcohol before wiping the Scanner Glass and White Sheet.







Pressure Roller

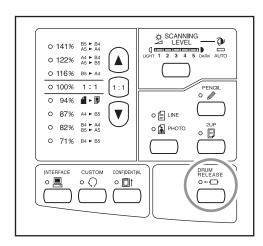
If the Pressure Roller holding printing paper to the Print Drum (Cylinder) is dirty, dirty lines may appear on the back of the printed material. If such a situation occurs, gently wipe the Pressure Roller with a soft cloth or tissue.

Important!:

· Make sure that the power of the machine is turned on when pulling out the Print Drum (Cylinder).

¶ Press the ∘ key.

Make sure that the Print Drum (Cylinder) Pullout indicator is tuned on.

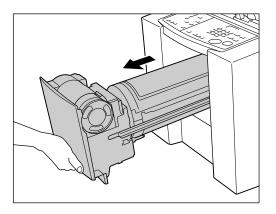


Important!:

 If you forcibly pull out the Print Drum (Cylinder) when its release indicator is tuned off, the Print Drum (Cylinder) may be damaged.

Pull out the Print Drum (Cylinder).

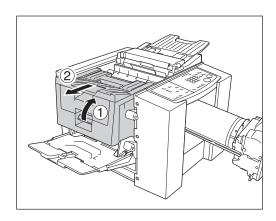
Grasp the Print Drum (Cylinder) Handle and pull out the Print Drum (Cylinder) until it stops.



3 Turn the machine off.

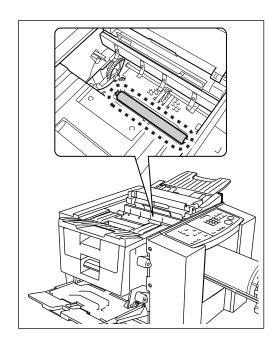
▲ Open the Master Disposal Unit.

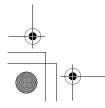
Grasp the Master Disposal Unit Release Lever, and open the Master Disposal Unit to the left.

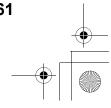


Wipe the roller.

Gently wipe the Pressure Roller with a soft cloth or tissue.







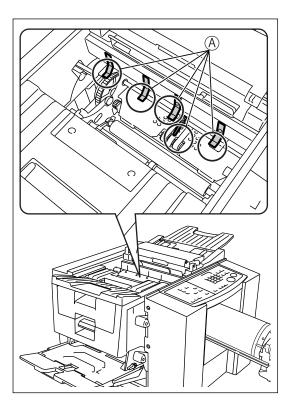




Maintenance

⚠Caution:

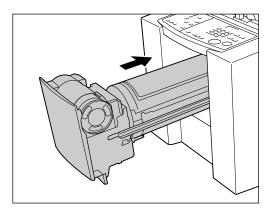
- Before cleaning the Pressure Roller, turn the machine off.
- When putting your hand into the unit, take care not to touch the paper separation hook or surrounding parts (A). The sharp tip of the hook and the cut surface of the metal can hurt your hand.
- Because ink may have adhered to the surface around the Print Drum (Cylinder), be careful that your hands and clothes do not get dirty. Rinse your hand immediately with a detergent if they become stained with ink.



Replace the Master Disposal Unit

- 7 Turn the Machine on.
- Return the Print Drum (Cylinder) to the machine.

Insert the Print Drum (Cylinder) until it stops.

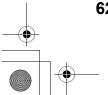


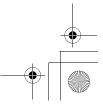
The Exterior

In order to protect the machine from dust, wipe the machine exterior periodically with a soft cloth. If using cleanser, consult your dealer or authorized service representative.

Important!:

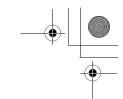
· Because the machine exterior is plastic, never use alcohol or a solvent when cleaning.

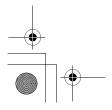




















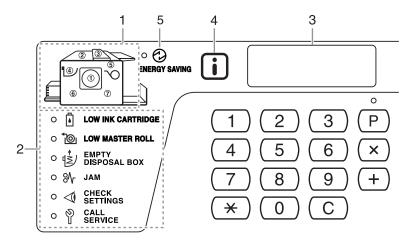
Check & Error Display

When an error occurs on the machine or when consumables or other sections are not yet ready, the Check & Error Display shows error locations and numbers indicating error types. For some errors, error numbers are shown on the Error Number Display (Print Quantity Display).

Checking with the Check & Error Display

Besides indicators that show error types, numbers that show error locations light.

Check the display and take an appropriate procedure according to the methods described on the subsequent pages.



1) Error Location Indicator

Numbers corresponding to error locations light.

2) Error Type Indicator

- (LOW INK CARTRIDGE) Indicator
 Blinks when the remaining ink quantity is small, and lights when the entire ink is consumed.
- (LOW MASTER ROLL) Indicator
 Blinks when the remaining master quantity is small, and lights when the entire master is consumed.
- (EMPTY DISPOSAL BOX) Indicator
 Lights when the Master Disposal Box is filled with discarded masters.
- OV (JAM) Indicator
 Lights when original or paper jams occur inside the machine or DF Unit.
- (CHECK SETTINGS) Indicator
 Lights when the Print Drum (Cylinder), or other items have not been set up yet.
- (CALL SERVICE) Indicator
 Lights when such an error occurs that needs advices or supports from service personnel.

3) Error Number Display

Error numbers appear and blink on the Print Quantity Display.

Error contents are shown with alphabetical characters (single digit) and numeric characters (two digits).

4) i Indicator

This machine controls its printing functions by collecting the "matching information" from the consumables being loaded on the machine.

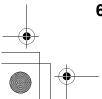
When the indicator lights up:The matching information has been collected and the printing functions are controlled normally.

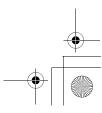
When the indicator goes out: The matching information has not been collected. The matching information needs to be entered. \$\tilde{\sigma}\$ p.71

5) Energy Saving Indicator

Lights when the machine is in the Sleep (energy saving) Mode.

Print operations cannot be performed when this indicator is lit. Press the Start/Wake-up key to activate the machine.



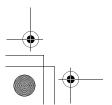


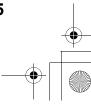




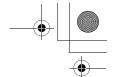
When the % (JAM) Indicator blinks
Check error locations and error numbers (on the Error Number Display) and take the following procedures:

Location No.	Error No.	or numbers (on the Er		Action
	A-02	A master has not been correctly wrapped around the Print Drum (Cylinder).	1) 2) 3)	Pull out the Print Drum (Cylinder). p.61 * If no master is wrapped around the Print Drum (Cylinder), proceed to Step 6). If wrapped, proceed to Step 2). Press the Print Drum (Cylinder) Release Lever (①), hold the edge of the Print Drum (Cylinder), and turn counterclockwise the Drum (Cylinder) until the clamp plate (metallic plate locking the master) comes to the top (②). Strongly press the Clamp Plate Release Lever (①) to unlock the clamp plate, hold the edge of the master, and then separate the Master while turning the Print Drum (Cylinder) (②).
	A-16	Unnecessary master remains on the Print Drum (Cylinder).	9) . T. E. Y W. th nn as . T. F. F. C V. ttl	Turn the Drum (Cylinder) counter-clockwise until it reaches the position where it is secured by the Drum (Cylinder) Release Lever (the position where the clamp plate is exactly next to the right frame). Set the Print Drum (Cylinder) into the machine. If the Drum (Cylinder) cannot be set, it has not been secured correctly. In this case, perform step 4 again. Open the Master Making Unit Cover and set the master again. Close the Master Making Unit Cover. Press the & key. Perform the master-making operation again. Caution: The Print Drum (Cylinder) consists of a lot of metallic parts. Do not touch those parts more than necessary. Your hand may be cut. When rotating the Print Drum (Cylinder) during maintenance, nold the outer edge of the Print Drum (Cylinder). Your hands may become dirty with ink if you press the master wrapped around the Print Drum (Cylinder). The clamp plate is open when you are pressing the Clamp Plate Release Lever. When you release the lever, the clamp plate closes. Take extreme care not to be pinched, otherwise, your hand may be injured. When you remove the master from the Print Drum (Cylinder), the ink is spread on the master. Take care not to allow the master to come in contact with other parts or objects.

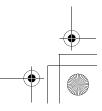






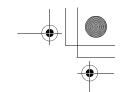


Location No.	Error No.	Cause	Action
	A-04	Master ejection has been failed.	 Pull out the Print Drum (Cylinder) and remove the master from the Print Drum (Cylinder) by hand. *p.65 Set the Print Drum (Cylinder) again. Press the *\Phi\$ key.
3	J01	An original jam has occured in the DF Unit.	Remove the original jammed in the DF Unit. • Grasp the Original Rease Lever and open the Scanner Cover to remove the jammed original.
	A-05	A master jam has occured in the master disposal section.	Remove the Master Disposal Box and remove the jammed master. **p.54* If you cannot remove the jammed master although you have removed the Master Disposal Box, pull out the Master Disposal Unit and remove the master. **Important!: **Once you pull out the Master Disposal Box, make sure to empty it before placing it into position.

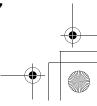




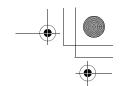




Location No.	Error	Cause	Action
	No.		
5	A-01 A-34	A master has not been correctly set.	 Open the Master Making Unit Cover, remove the master roll, and set the master correctly. p.52 1) Remove the master roll and set the master again. 2) Close the Master Making Unit Cover. p.52 3) Press the ◆ key.
	A-17	A master has not been correctly cut.	 Open the Master Making Unit Cover, cut the master with scissors, etc. Close the Master Making Unit Cover. Press the key.
	, , , ,		4) Pull out the Print Drum (Cylinder) and remove the master from the Print Drum (Cylinder) by hand.
			5) Set the Print Drum (Cylinder) again.
		Paper jammed in the Paper Passing area.	Check all the lighting sections in the Paper Passing area.
		A paper jam has occured on the Paper Feed Tray section.	1) Press the Paper Feed Tray Lock Lever to lower the Paper Feed Tray, and remove the jammed paper. If you cannot remove the jammed paper, remove it while pressing the Jam Release Lever ((A)).
			2) Set paper again. Then flip the lever up.
6 0	JXX		3) If the error indications do not disappear, press the // key





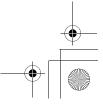


Location No.	Error No.	Cause	Action
	JXX	A paper jam has occured on the Paper Receiving Tray section.	Remove the paper jammed on the Paper Receiving Tray section. If you cannot remove the jammed paper, remove it after pulling out the Separation Fan ((A)). If you have changed the horizontal paper position, also adjust the position of Receiving Tray Paper Guides. If the error indications do not disappear, press the // key.

Note:

• "JXX" changes by error combinations of jam.





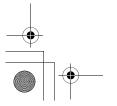


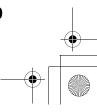


When the <∅ (CHECK SETTINGS) Indicator blinks

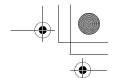
Check error locations and error numbers (on the Error Number Display) and take the following procedures. If an error number is not shown, press the \bigstar key.

Location No.	Error No.	Cause	Action
	d-01 d-12	The Print Drum (Cylinder) has not been correctly inserted.	Set the Print Drum (Cylinder) correctly. p.62
	d-03	The Ink Cartridge has not been set or it has not been correctly set.	Set an Ink Cartridge correctly. p.50
	d-04	An inappropriate Ink Cartridge has been	Set an Ink Cartridge specific to the machine. p.50
		set.	Important!: • Use an Ink Cartridge specific to the machine. Using other Ink
		The label on the Ink Cartridge outlet surface has come off or surface is with dirt.	Cartridges can result in malfunction or any other troubles. The label on the Ink Cartridge outlet surface contains information needed for printing. If the machine cannot read the information, it does not operate. Set an Ink Cartridge that is specific to the machine and that is with label attachment and free from dirt.
	F-01	A master has not been wrapped around the Print Drum (Cylinder).	Press the // key, then press the 🏻 key. Or perform mastermaking operation to wrap a master around the Print Drum (Cylinder). If you leave the machine without a master wrapped around the Print Drum (Cylinder), malfunction may occur.
2	d-07 d-10	The Master Disposal Box has not been set or it has not been correctly set. The Master Disposal Unit has not been correctly closed.	Set the Master Disposal Box correctly. p.54 or Close the Master Disposal Unit. p.66

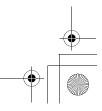








Location No.	Error No.	Cause	Action
	d-05	A master roll has not been set or it has been incorrectly set.	Set a master roll correctly and close the Master Making Unit Cover. p.52 If a rewound master has been wrinkled or has worn off, cut the edge of the master straight and then set the master again.
5	d-08	The Master Making Unit Cover has not been correctly closed.	Close the Master Making Unit Cover correctly. p.52
	d-17	An inappropriate master roll has been set.	Set a master roll specific to the machine.
		The label at the opposite side of imark of the master core has been peeled off or contaminated.	The label attached to the opposite side of i mark of the master core has the information needed for printing. The machine does not start printing if it cannot read the label information. Make sure that the master roll is specific to the machine and that the label of master roll is not peeled off or contaminated.
	d-06	The Separation Fan on the paper output side is not set correctly.	Set the Separation Fan correctly.
No indicator lights.	F-05	An attempt is being made to master making a smaller number of pages than the minimum print quantity.	Select a larger number of pages than the minimum print quantity. Or change the initial setting of "Minimum Print Quantity" in Custom Setting Mode. *p.47







The (LOW INK CARTRIDGE) Indicator

When the indicator brinks:

The remaining ink quantity is small (10% or less). Prepare a new lnk Cartridge.

When the indicator lights:

Because the entire ink has been consumed, set a new ink cartridge.

₽p.50

The ' (LOW MASTER ROLL) Indicator

When the indicator brinks:

The remaining master quantity is small (10% or less). Prepare a new master.

When the indicator lights:

Because the entire master roll has been consumed, set a new master roll.

☞p.52

When the ((EMPTY DISPOSAL BOX) Indicator lights

Because the Master Disposal Box is full, remove the box and discard the ejected masters. **₽**p.54

When the \(\text{(CALL SERVICE) Indicator lights} \)

Check error numbers shown on the Error Number Display and contact your dealer or authorized service representative.

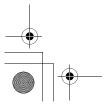
When the i indicator is off and "H" is shown on the Print Quantity Display.

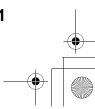
In order to assure optimum printing, the machine acquires information from the consumables. If acquired matching information is not proper, "H" is shown on the Print Quantity Display. Enter an appropriate

Entering an inappropriate parameter does not affect usual operations but may result in bad print quality. The table shows the "H" numbers to be shown on the Print Quantity Display and the selectable parameters.

H No.	Description	Parameter
H1	Ink color (colour) setting Select the same color (colour) as the currently used for Print Drum (Cylinder).	1: black
H4	Master-making density setting Set the reference density for the master-making process.	1 (light) - 10 (dark)

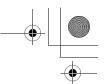
- When you set the power switch OFF and set the swich ON again, entered H No's information disappears and thus you need to enter H No's again.
- If you are not sure the best setting for master-making density, we may suggest you start from 1(default setting) and adjust if necessary based on the result of print.







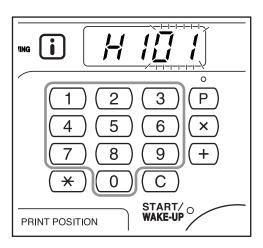




Use the following procedure to enter necessary information.

Enter a parameter using the Print Quantity keys.

The parameters that can be entered differ among the consumables.



Press the **\$\Phi\$** key to complete the settings.

If the next H No. appears, repeat Steps 1 and 2.

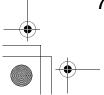
Note:

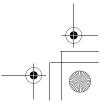
· When necessary entry is completed, the Print Quantity Display restores to its normal status and is available for usual operations.

When the $\ \mathbf{i}\$ indicator is off and Error Type indicator lights

When an Error Type indicator lights, please refer to the following pages.

Error Type	Error No.	Reference page
	d-04	☞p.69
⟨¶ (CHECK SETTINGS)	d-17	☞ p.70
	If an Error No. "d-xx" other than above is displayed, please refer to the reference pages.	≈p.69~≈p.70
(LOW MASTER ROLL)	-	☞p.52
(LOW INK CARTRIDGE)	-	☞ p.50





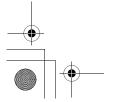


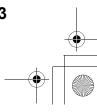


Troubleshooting Tips

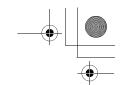
If any problems occur during printing, check the following points and take appropriate procedures before calling your authorized service representative.

Problem	Cause	Action
The machine does not start when the power switch is pressed.	You may have pressed the power switch while the machine was in the Sleep Mode.	Try pressing the power switch again. Before pressing the power switch, you may want to find out whether the machine is indeed in the Sleep Mode, by checking the indicator on the Control Panel. If the key is lit, the machine is in sleep mode. Press the key to end sleep mode and to activate the machine.
		Note: • When the machine is in the Sleep (energy saving) Mode, only the Sleep Indicator and the Start/ Wake-up key light on the control panel. The other indicators and counters do not light. When the machine is in the Sleep Mode, it can only receive original data from a PC, and all other functions operate as if the machine has its power turned off.
	Power has been disconnected.	 Check if the power cord has been firmly connected to an electric outlet. Check if the commercial power circuit breaker is on.
The Print Drum (Cylinder) cannot be placed into position.	The Print Drum (Cylinder) was stopped at an inappropriate position after rotation.	After manually rotating the Print Drum (Cylinder), rotate it until it is locked by the Print Drum (Cylinder) Release Lever.



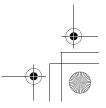






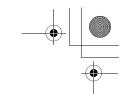
Problem	Cause	Action
An error indication does not disappear even though consumables (ink, master roll) are set.	The consumables (ink, master roll) have not been correctly set.	After inserting the Ink Cartridge until it stops. Or set the Ink Cartridge again. p.50
		Set a master roll so that the comes to the front side. p.52
	The Ink Cartridge does not contain ink information.	Do not remove the label attached on the Ink Cartridge outlet section. If you did so, set a new Ink Cartridge. p.50
	The master roll does not contain master information.	Do not remove the cap from the master core. p.52
There is no image on copies.	The original is placed face up.	Place the original face down.
Portion on copies is missing.	The Scanner Glass of the DF Unit is not clean.	Wipe the Scanner Glass with a soft cloth, for example. p.60
	A foreign object may exist on the master.	Pull out the Print Drum (Cylinder) and check if any object exists on the master. If a foreign object exists between the master and the Print Drum (Cylinder), remove the master. Then set the Print Drum (Cylinder) and perform the master-making operation again. p.65
Vertical blank lines are found on printed copies.	The Thermal Print Head and the Scanner Glass have been smudged.	Wipe the Thermal Print Head and the Scanner Glass with a soft cloth or others. p.58
The unwanted background of an original is picked up on copies.	If newspaper or colored (coloured) paper is used as an Original, the background is picked up on copies.	Set the scanning level to "Auto" or lower the level, and then perform the master-making operation again. p.29



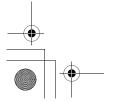


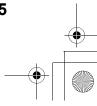




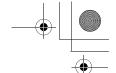


Problem	Cause	Action
Dirt is found on printed copies.	The Scanner Glass of the DF Unit is not clean.	Wipe the Scanner Glass with a soft cloth or others. p.60
The trailing edge of printed copies are stained with ink.	The size of original is almost equal to the maximum printing area size.	Reduce the size of original and make a Master again. p.12
The edges of printed copies are smudged with ink.	When printing thick paper such as cards, corners of the paper contacted and damaged the master.	Make another master and print with the new master. Or pull out the Print Drum (Cylinder) and attach cellophane tape to the damaged section on the master. However, if attached with cellophane tape, a master may not be properly sent to the Master Disposal Box.
The back of printed copies is smudged with ink.	The Pressure Roller has been stained with ink.	Pull out the Print Drum (Cylinder) and open the Master Disposal Unit, wipe the Pressure Roller with a soft cloth or others. p.61 If the print position is outside the print paper, this may cause the Pressure Roller to be stained with ink. Be careful when changing the size of print paper or shifting the print position. p.35
Printed images are faint. Printed texts are blurred.	The machine was not used for an extended period of time, and printing was just restarted.	If the machine is not used for an extended period of time, ink on the surface of the Print Drum (Cylinder) may dry. This results in faint or blurred printing just after printing is started. Press the key to make several copies, and then start printing for actual use.
	Faint originals result in faint images.	Increase the Scanning Level and perform the master-making operation again. • p.29 For originals written with a pencil, select the Pencil mode. • p.27
	The machine is installed or the Ink Cartridge is stored at low temperatures (below 15° C (59° F)).	Use the machine after keeping it at room temperature for a while.





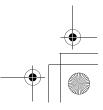




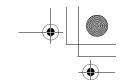
Problem	Cause	Action
The left and right print positions have been shifted.	The left and right print positions have not been adjusted for the center.	Lower the Paper Feed Tray, adjust the horizontal position, and then perform proof copy to check the position. pp.35
Paper sticks to the surface of the Print Drum (Cylinder). (The % indicator lights frequently.)	The margin at the top of the original or print is too small.	The margin of the original (top of the print in the paper output direction) must be 10 mm (3/8") atleast. Lower the vertical print position. If this adjustment is impossible, reproduce an original with enough margin and perform the master-making operation again.
	The print paper is inappropriate.	Use the recommended paper. p.10
	The original has a solid black portion at its top.	If an original has a solid black portion at the top, printed copies may not properly output. Replace the original in the reverse direction and restart master-making process.
Printed and curled copies are output.	The print paper is loaded at a horizontal grain direction.	Load print paper with a vertical grain direction.
Printed copies are not neatly aligned on the Paper Receiving Tray. (The % indicator lights frequently.)	The positions of the Paper Receiving Tray and the Receiving Tray Paper Guides are inappropriate.	Adjust the Paper Receiving Tray and the Receiving Tray Paper Guides to the size of paper. For thick paper, slightly widen them as necessary. If you have adjusted the horizontal position on the Paper Feed Tray, shift the Receiving Tray Paper Guides in the same direction. **P.22*
	The positions of the Paper Jump Wings are inappropriate.	Adjust the Paper Jump Wings according to the size position of paper. *p.22
The printing paper is not sent from the Paper Feed Tray.	Did you lower the Paper Feed Tray before loading the paper?	Lower the Feed Tray Lock Lever, and load the paper again. After loading the paper, raise the Feed Tray Lock Lever.
	Did you raise the Feed Tray Lock Lever after loading the paper?	Raise the Feed Tray Lock Lever after loading the paper.
The printing paper is not sent from the Paper Feed Tray. (No paper or piled paper is fed.)	The print paper is inappropriate.	Use the recommended paper. p.10
ріїси рареї із іси.)	The position of the Paper Feed Pressure Lever is inappropriate.	For thick or smooth-surface paper, set the Paper Feed Pressure Lever to the Thick paper position (). *p.21



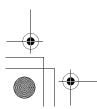


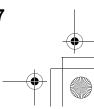






Problem	Cause	Action
The औr indicator lights even when a paper jam has not occured.	Lifted paper was ejected at the time of the second rotation of the Print Drum (Cylinder).	Check the printed copies, and if the top margin is less than 10 mm ($^{3}/_{8}$ "), slightly lower the print position.
	The machine is in the direct sunlight.	If sunlight is projected to the machine, the sensor does not function correctly. Use a curtain for example to shut out sunlight or move the machine to a place free from direct sunlight.
The machine repeats the master-making process for each original.	"Collate Copies" or "Collate" was selected for printer driver settings for the received document data.	Cancel the current print job and resend the document data without "Collate Copies" or "Collate" selected for the printer driver settings.
The ♦ key blinks.	Received data is waiting for output.	Press the � key to output the data. To delete the data waiting for output, press the 🗏 key.
" " appears on the Print Quantity Display and the machine does not start.	The power was turned off when the machine was in operation.	Press the ♦ key.





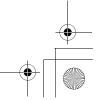




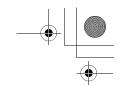
Specifications

RISO KZ30

Feature	Unit of mm	Unit of inch
Master-making/ printing methods	High-speed digital master-making / fully automatic stencil printing	
Original Type	Sheet	
Original Size	Max. 257 mm × 364 mm Min. 182 mm × 257 mm	Max. 10 $^{1}/_{8}$ " × 14 $^{5}/_{16}$ " Min. 7 $^{3}/_{16}$ " × 10 $^{1}/_{8}$ "
Original Paper Weight	50 g/m²-107 g/m²	14-lb bond to 28-lb bond
Original paper capacity	1 original	1 original
Print Paper Size	Max. 297 mm × 420 mm Min. 182 mm × 257 mm	Max. 11 $^{11}/_{16}$ " × 16 $^{17}/_{32}$ " Min. 7 $^{3}/_{16}$ " × 10 $^{1}/_{8}$ "
Paper Supply Capacity	500 sheets (64 g/m²), less than 45 mm stack height	500 sheets (17-lb bond), less than 1 $^{25}/_{32}$ " stack height
Paper Receive Capacity	500 sheets (64 g/m²), less than 45 mm stack height	500 sheets (17-lb bond), less than 1 $^{25}/_{32}$ " stack height
Print Paper Weight	50 g/m²-128 g/m²	14-lb bond to 34-lb bond
Image Processing Mode	Line, Photo, Duo, Pencil	
Master-making Time	Approx. 48 sec. (for A4/portrait/100% reproduction ratio)	
Printing Area	Max. 249 mm × 352 mm	Max. 8 ³ / ₁₆ " × 13 ¹⁷ / ₃₂ "
Print Reproduction Ratio	100% reproduction ratio Standard reproduction ratio(enlargement): 141%, 122%, 116% Standard reproduction ratio(reduction): 94%, 87%, 82%, 71%	100% reproduction ratio Standard reproduction ratio(enlargement): 154%, 129%, 121% Standard reproduction ratio(reduction): 94%, 78%, 65%, 61%
Print Speed	Approx. 60, 90 pages per minute (two steps variable)	
Print Position Adjustment	Vertical: ±10 mm Horizontal: ±10 mm (for B4 portrait in center position)	Vertical: $\pm \frac{3}{8}$ " Horizontal: $\pm \frac{3}{8}$ " (for Legal portrait in center position)
Ink Supply	Fully automatic (800 ml per cartridge)	
Master Supply/ Disposal	Fully automatic (approx. 100 sheets per roll)	





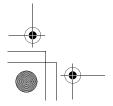


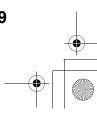
Appendixes

Feature	Unit of mm	Unit of inch	
Master Disposal Capacity	20 sheets		
User Interface	LED panel	LED panel	
Power Source	100-120V/220-240V~, 50-60 Hz, 1.5/0.7 A		
Dimensions	When in use: 1250 mm (W) \times 655 mm (D) \times 510 mm (H)	When in use: 49 $^{7}/_{32}$ " (W) \times 25 $^{25}/_{32}$ " (D) \times 20 $^{1}/_{16}$ " (H)	
Weight	Approx. 52 kg	Approx. 114.8 lb	
Safty	IEC60950-1 compliant, indoor, pollution degree 2*, At altitudes of 2000 m or lower *The pollution degree of the usage environment due to dirt and dust in the air. Degree "2" corresponds to a general indoor environment.		
Optional Accessories	RISO PC Interface Card USB 2.0		

Notes

- As we are constantly improving our products, the machine may differ in some respects from the illustrations used in this manual.
- The specifications are subject to change without prior notice.







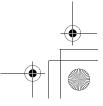


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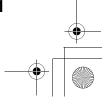




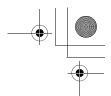
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